H.R. 1867 – The National Science Foundation Authorization Act of 2007

SECTION BY SECTION ANALYSIS OF THE BILL AS REPORTED BY THE SUBCOMMITTEE APRIL 19, 2007

- SEC. 1. SHORT TITLE The National Science Foundation Authorization Act of 2007.
- SEC. 2. DEFINITIONS Provides definitions for terms used in this Act.
- SEC. 3. AUTHORIZATION OF APPROPRIATIONS Authorizes \$21 billion for the National Science Foundation (NSF) for fiscal years 2008 2010, including \$16.4 billion for research and related activities (R&RA), \$2.8 billion for education and human resources (EHR), and \$787 million for major research facilities (MREFC). Allocates funding for major research instrumentation (MRI) and the Research Experiences for Undergraduates (REU) program under the R&RA account, and for certain K-12 and two-year college education and teacher training programs. Raises the ceiling for MRI awards step-wise as the total MRI budget grows and requires 30 percent cost-sharing on MRI awards for certain Ph.D.-granting institutions. Requires the Director to fund undergraduate education division programs at a growth rate equal to the Foundation's overall growth rate.
- SEC. 4. CENTERS FOR RESEARCH ON LEARNING AND EDUCATION IMPROVEMENT Requires the Director to continue funding these Centers, which were established by the 2002 NSF Reauthorization.
- SEC. 5. INTERDISCIPLINARY RESEARCH Requires the National Science Board to evaluate the current and potential role of the Foundation in supporting interdisciplinary research, in providing adequate information to the scientific community about opportunities for funding of interdisciplinary research proposals, and in engaging undergraduate students in interdisciplinary research.
- SEC. 6. NEW INVESTIGATORS Establishes a pilot program of one-year seed grants for new investigators to improve their likelihood of being awarded standard competitive research grants. Uses an existing funding mechanism, the Small Grants for Exploratory Research program, to carry out the pilot program. Requires the Board to evaluate the effectiveness of the pilot program after three years.
- SEC. 7. BROADER IMPACTS MERIT REVIEW CRITERION Requires the Director, in reviewing proposals under criterion 2 of the merit review process, to give special consideration to proposals that include partnerships between academic researchers and industrial scientists and engineers and that address research areas that have been identified as having high importance for future national economic competitiveness. Also requires the Director to encourage industry/university partnerships that include cost-sharing. Finally requires report to Congress on the impact of the broader impacts grant criterion used by the Foundation.

- SEC. 8. POSTDOCTORAL RESEARCH FELLOWS Requires funded investigators to report on activities to mentor postdoctoral research fellows funded under their grants.
- SEC. 9. RESPONSIBLE CONDUCT OF RESEARCH Requires each institution funded by NSF research grants to provide a plan for appropriate training in the responsible and ethical conduct of research to supported individuals.
- SEC. 10. REPORTING OF RESEARCH RESULTS Requires the Director to make available to the public, through the Foundation website, final project reports and all citations of published work resulting from NSF-funded research.
- SEC. 11. SHARING RESEARCH RESULTS Makes investigators who fail to comply with existing NSF policy on sharing of research results (Section 734 of the NSF Grant Policy Manual) ineligible for future NSF awards until they comply with the policy.
- SEC. 12. FUNDING FOR SUCCESSFUL STEM EDUCATION PROGRAMS Permits the Director to exempt from the recompete requirement certain STEM education programs, including minority-serving programs and teacher training programs, that continue to demonstrate positive performance.
- SEC. 13. COST SHARING Requires the Board to evaluate the impact of the ruling to eliminate cost-sharing at the Foundation on programs that already do involve or may involve industry partnership.
- SEC 14. DONATIONS Allows NSF to accept private funds for certain prize competitions.
- SEC. 15. ADDITIONAL REPORTS Requires the Board to evaluate the Foundation policies on funding for pre-construction and maintenance and operation costs for major research equipment and facilities. Requires plans for upgrades of Antarctic facilities to be included in the annual national research facilities construction, repair and upgrades plan required under SEC 201(a)(1) of the NSF Authorization Act of 1998, as amended. Requires the Director to catalog all educational activities supported by R&RA programs and report to Congress. Requires the Director to report on funding success rates and distribution of awards for the Research in Undergraduate Institutions program. Requires the Director to report on how funds are allocated for education and human resources activities supported by the Foundation.
- SEC. 16. ADMINISTRATIVE AMENDMENTS Changes audit requirement from every year to every three years for assessment of the compliance of the Board with the requirements of the Government in Sunshine Act. Gives the Board authority to take on IPA assignees ("rotators") to supplement permanent staff.

SEC. 17. NATIONAL SCIENCE BOARD REPORTS – Amends the National Science Foundation Act of 1950 so that National Science Board reports are submitted directly to Congress from the Board, rather than through the President.

SEC. 18. NATIONAL ACADEMY OF SCIENCE REPORT ON DIVERSITY IN STEM FIELDS – Requires the Foundation to enter into a contract with the National Academies of Sciences for a report on barriers to and strategies for increasing participation of underrepresented minorities in STEM fields.